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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,575	07/07/1999	CARMELO ZACCONE	Q55017	5420

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SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 200373213

EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/348,575

Applicant(s)

ZACCONE ET AL. 

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 is/are allowed.
- 6) ☒ Claim(s) 1,5 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/12/2004 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art 'AAPA' in view of Phillips (US 6,400,712).

Regarding claims 1 and 5, AAPA teaches an Internet forwarding method, for forwarding internet packets from a host

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connected to an Internet towards a destination host connected to a privately addressable Internet network, where said Internet network and said privately addressable Internet network are coupled through at least one edge router and where said destination host is assigned a global Internet address, including forwarding of said Internet packets from one of said at least one edge router towards said destination host based upon the said global Internet address (pg. 1 lines 7-27).

AAPA fails to teach forwarding towards said destination host based only on said global Internet address.

Phillips teaches forwarding towards said destination host based only on said global Internet address (col. 2 lines 21-32).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of AAPA by using routing daemons to update the routing tables in the network as taught by Phillips. This would improve the system since the prior art technique of establishing a tunnel between the edge router and the addressed private host has disadvantages such as the edge router is heavily loaded, which creates a single point of failure (spec: pg. 1 line 28 - pg. 2 line 1).

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Regarding claim 16, the destination host is only reachable from within the privately addressable network (AAPA: pg. 1 lines 7-27).

Regarding claims 17 and 19, the privately addressable network comprises elements that are only privately addressable (AAPA: pg. 1 lines 7-27).

Regarding claims 18 and 20, the Internet packets are forwarded from the at least one edge router to the destination host via said elements only based on said global Internet address (Phillips: (col. 2 lines 21-32)).

Regarding claim 20, in addition to the limitations previously addressed, the destination host is a terminal within the privately addressable network (AAPA: pg. 1 lines 15-18).

Allowable Subject Matter

4. Claims 9-15 are allowed.
5. Claims 2-4 and 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2, 6, and 9, although Sosa teaches notifying each router of said privately addressable Internet network about a presence of a destination host by a router-daemon using Open Shortest Path First protocol flooding (see section 2.1), nothing in the prior art of the record teaches nor fairly suggests activating the router daemon at the destination host by assignment of a global Internet address, in combination with all the limitations listed in the claim.

Regarding claim 3, 7, 10-12 although Sosa teaches notifying each router of said privately addressable Internet network situated on a shortest path (see section 2.1) by sending a Resource Reservation Protocol message / Link State Advertisements, nothing in the prior art of the record teaches nor fairly suggests the Link State Advertisement is sent at assignment of a global Internet address, in combination with all the limitations listed in the claim.

Regarding claims 4 and 8, nothing in the prior art of record teaches or fairly suggests the edge router setting up the

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multicast groups in combination with the other limitations of the claims.

Regarding claim 13, nothing in the prior art of the record teaches or fairly suggests a multicast subscription means, in view of the teachings of the combination of AAPA and Phillips in combination with all the limitations listed in the claim.

Regarding claims 14 and 15, nothing in the prior art of the record teaches or fairly suggests a multicast group updating means, coupled with an input to an output of the message receptions means and adapted to interpret the multicast message containing the global Internet address of the destination host and update a multicast group in order to establish a branch of a multicast tree, wherein at least one edge router sets up the multicast group, in combination with the other limitations listed in the claim.

Response to Arguments

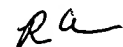
6. Applicant's arguments with respect to amended independent claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ronald Abelson
Examiner
Art Unit 2666


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 1/3/05